Properties of Solaris-Shield™

PSC has developed a technique making it possible to embed the metal mesh as an integral part of the acrylic filter so that unnecessary refraction surfaces are not created. The embedded mesh is typically made of stainless steel or copper.

When the Solaris-Shield™ filter is placed in front of certain types of displays, optical interference (Moiré) can occur if the mesh is located directly above the dots in the display. This distracting effect can be avoided by rotating the mesh into a certain angle compared to the display. The EMI shielding filters from PSC can be mounted at any angle between 0° and 90°.

In order to meet the specified data, it is vital that electrical contact is made between the entire perimeter of the mesh and the cabinet of the appliance. This contact can be established by applying conductive silver or nickel paint to the edge of the filter. The filter should then be mounted in the panel with a conductive gasket or conductive adhesive.

Colour and Surface Features

PSC’s Solaris-Shield™ EMI-shielding windows can be supplied in more than 40 different colours and the geometrical processing possibilities are virtually unlimited. Clear hard coat and non-glare can both be applied to Solaris-Shield™.
Technical Data

- Light transmittance approximately 78% compared to transparent acrylic
- Thickness: 1, 1.5, 2, 2.5, 3 und 4 mm
- Mesh: Bright or blackened non-reflective
- The mesh can be orientated between 0° - 90°
- Flexible, conductive silver or nickel busbar on edges
- Standard operation temperatures between -40°C to 70°C
- Dimensions up to 1500 x 1000 mm
- Several standard mesh types can be embedded i.e. copper 100 OPI Ø 0.03 mm and stainless steel 100 OPI Ø 0.025 mm
- Standard mesh types can be embedded upon request
- Wire diameter: 0.025 mm, 100 opi

Performance Characteristics
EM Nearfield, open area 400 x 300 mm